

FIG.1

(A)

(B)

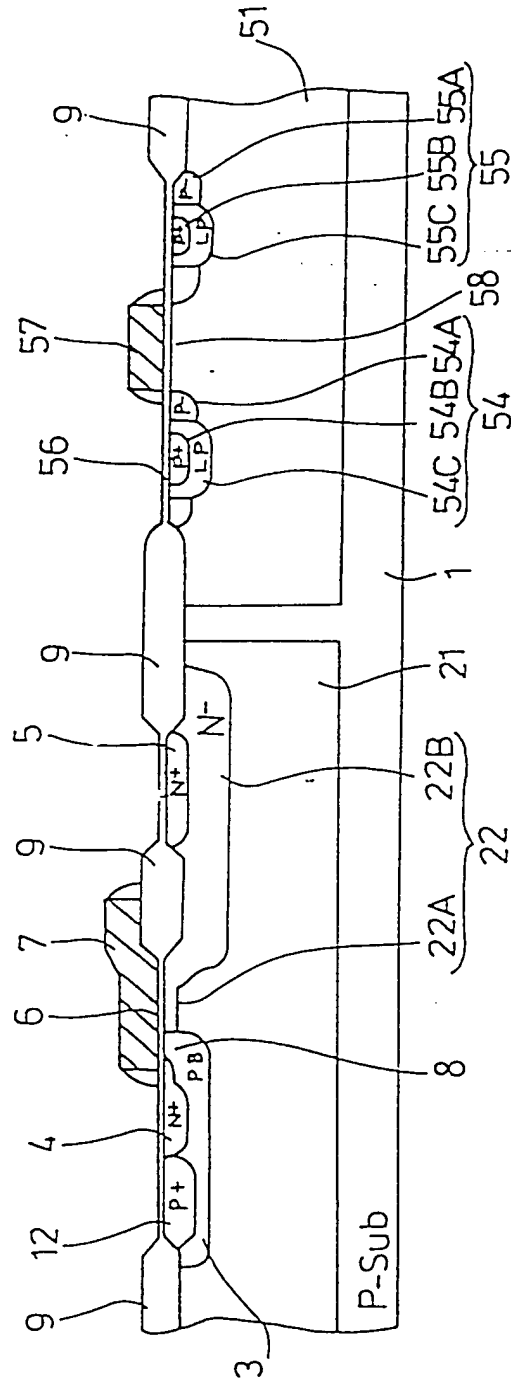
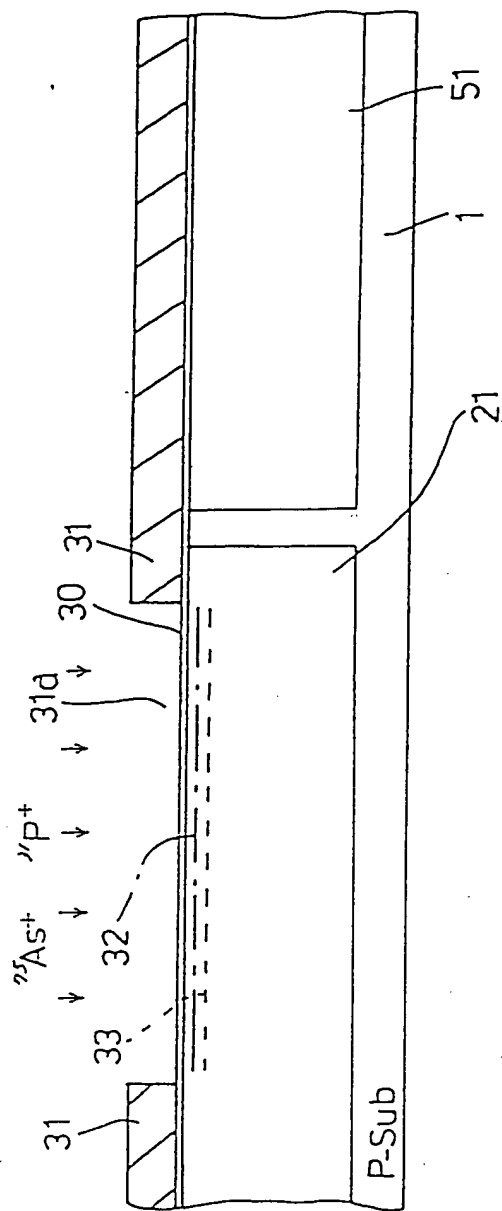


FIG. 2A



(A)

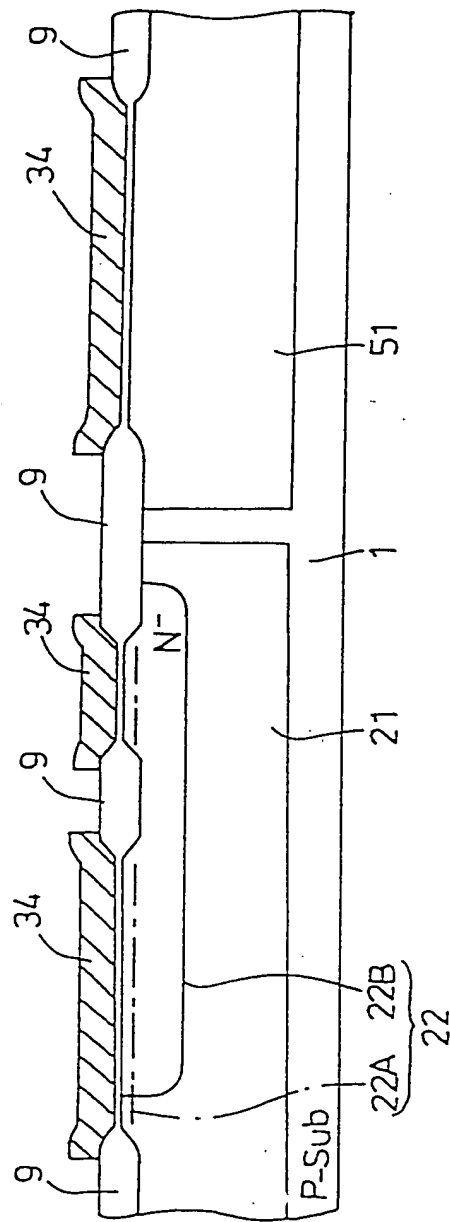


FIG. 2B

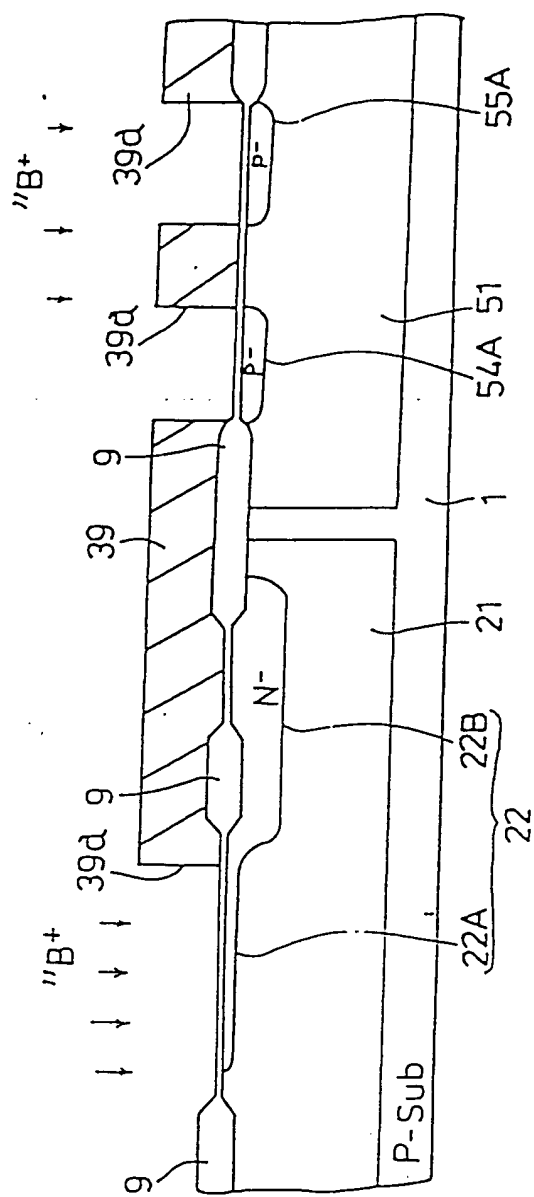


FIG. 3A

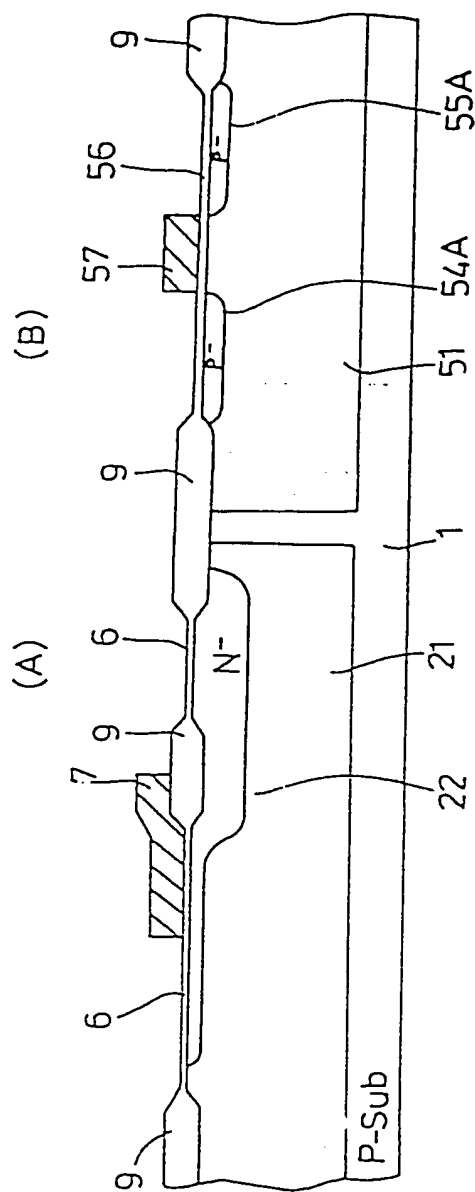


FIG. 3B

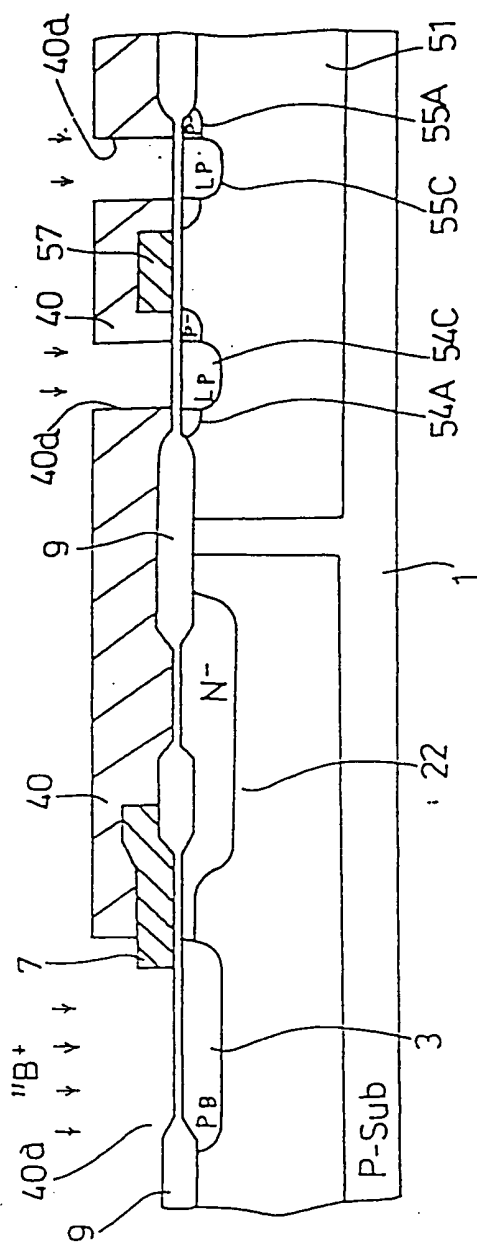


FIG. 4A

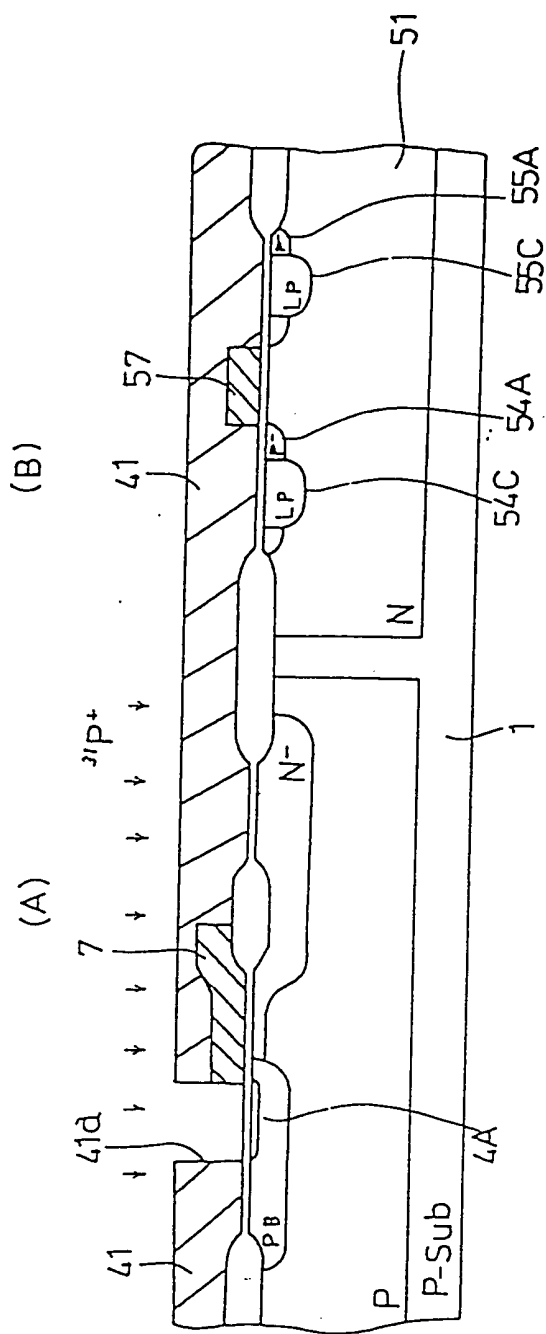


FIG. 4B

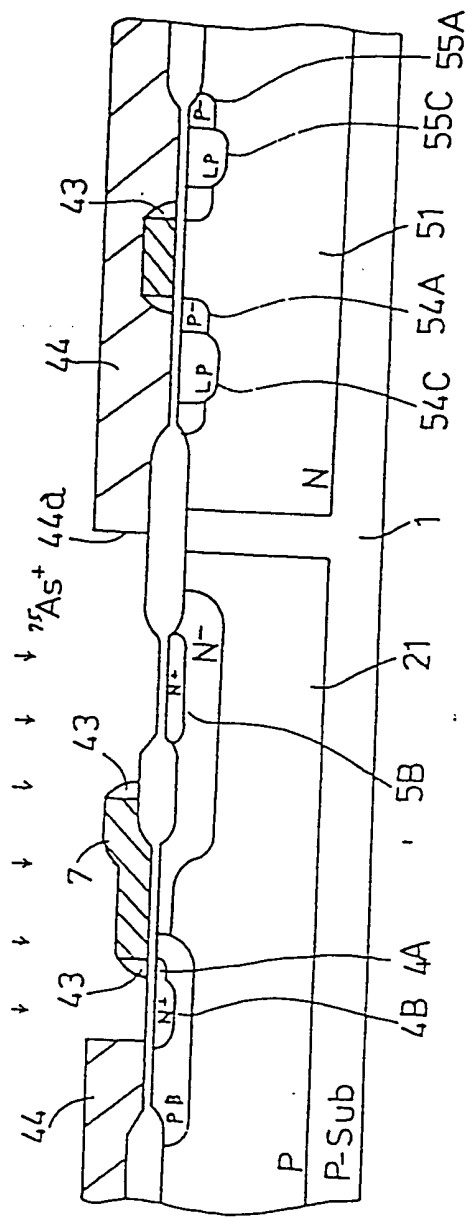


FIG. 5A

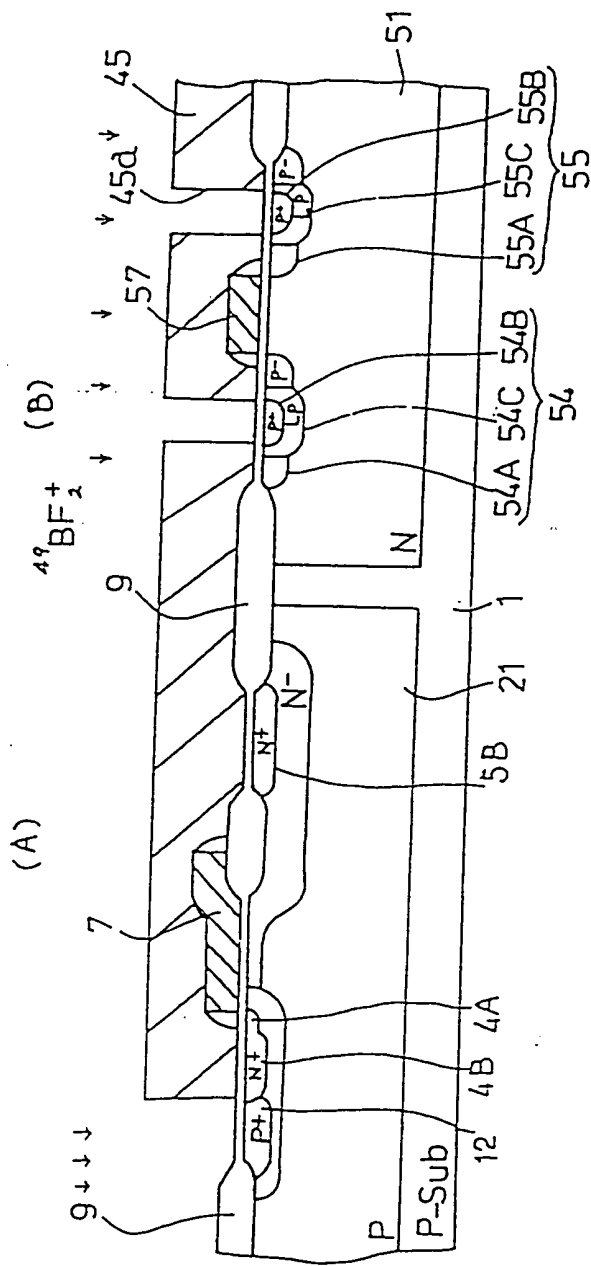


FIG. 5B

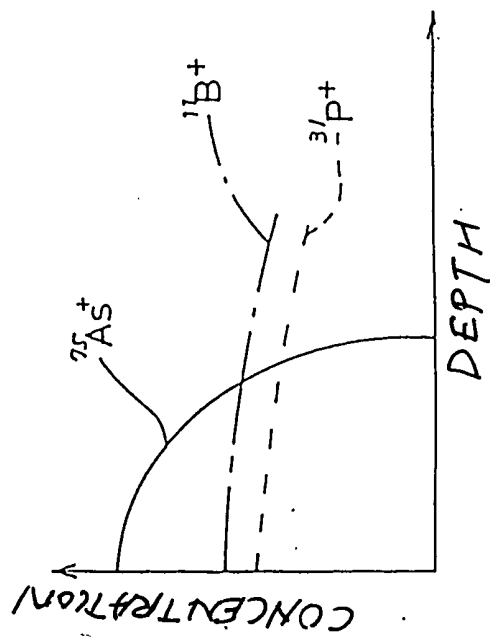


FIG.6

(A)



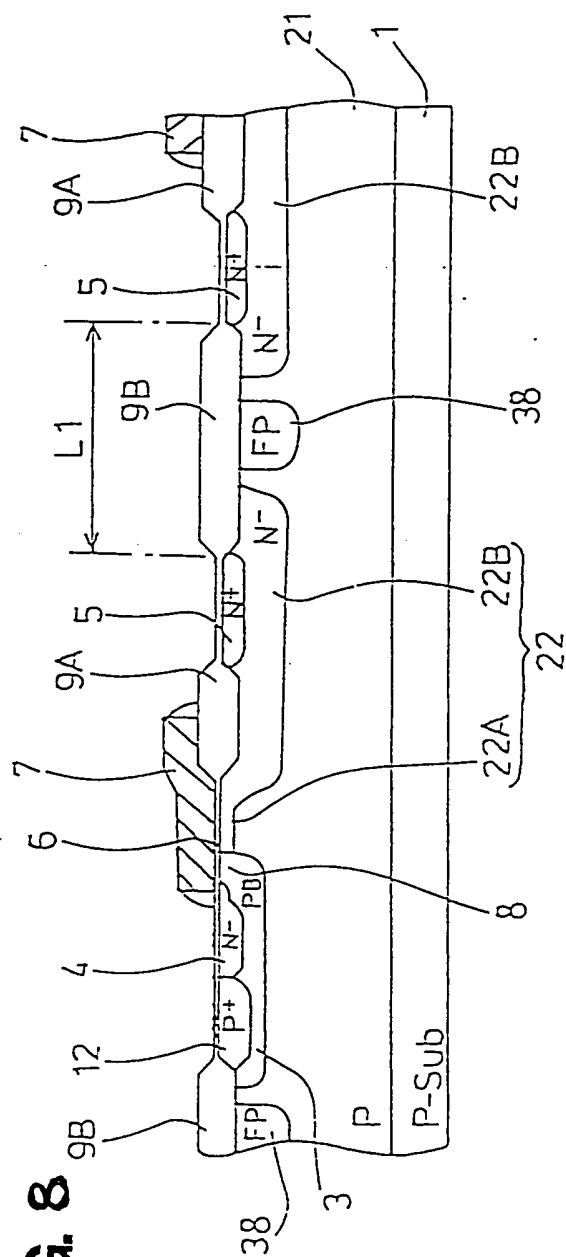
[illegible]

FIG. 9

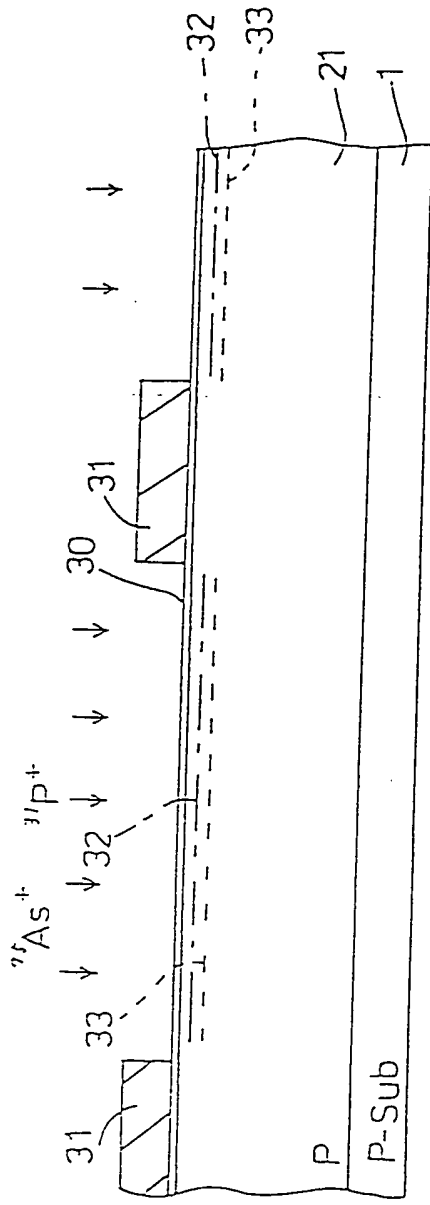
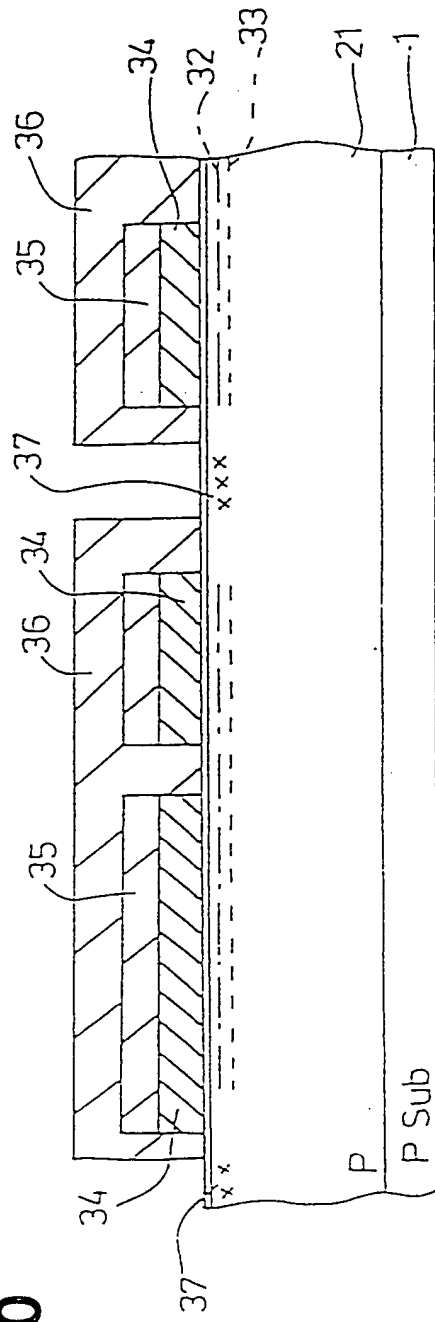


FIG.10



This diagram shows a cross-sectional view of a semiconductor device. It features a substrate with a top layer 1 and a lower layer 21. Two N+ regions are formed in the substrate, each with a top surface 9A and a side surface 9B. A layer 34 is deposited on the top surfaces 9A. Between the N+ regions are two FP (Field Plate) regions. The device is divided into two symmetrical halves by a central vertical line, with labels 22A, 22B, and 22 indicating the left half, and 22A, 22B, and 22 indicating the right half. A label 38 points to the central region between the FP regions.

FIG.12

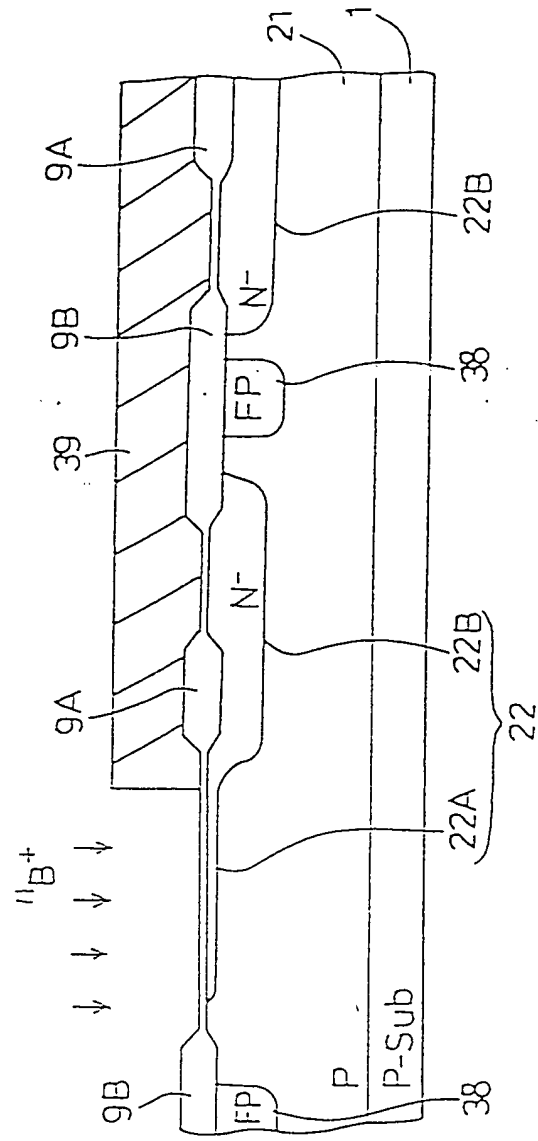


FIG. 13

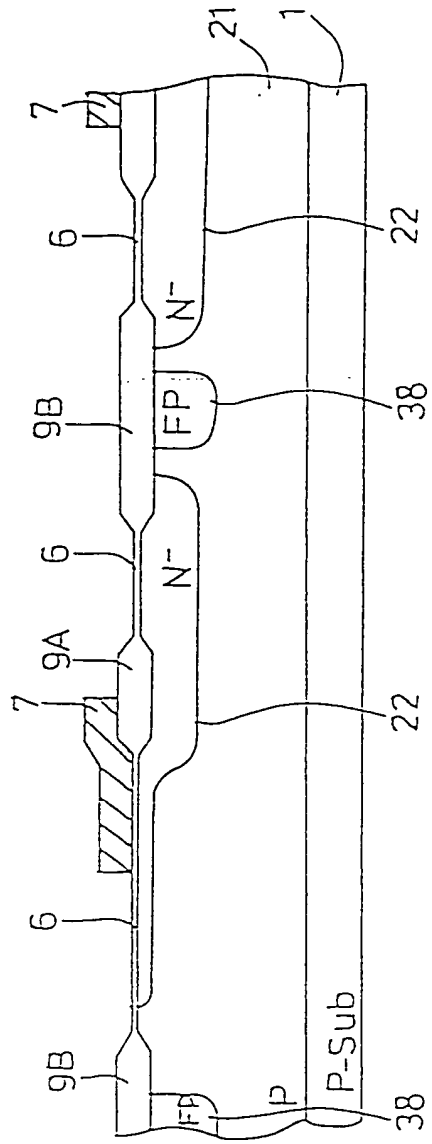


FIG.14

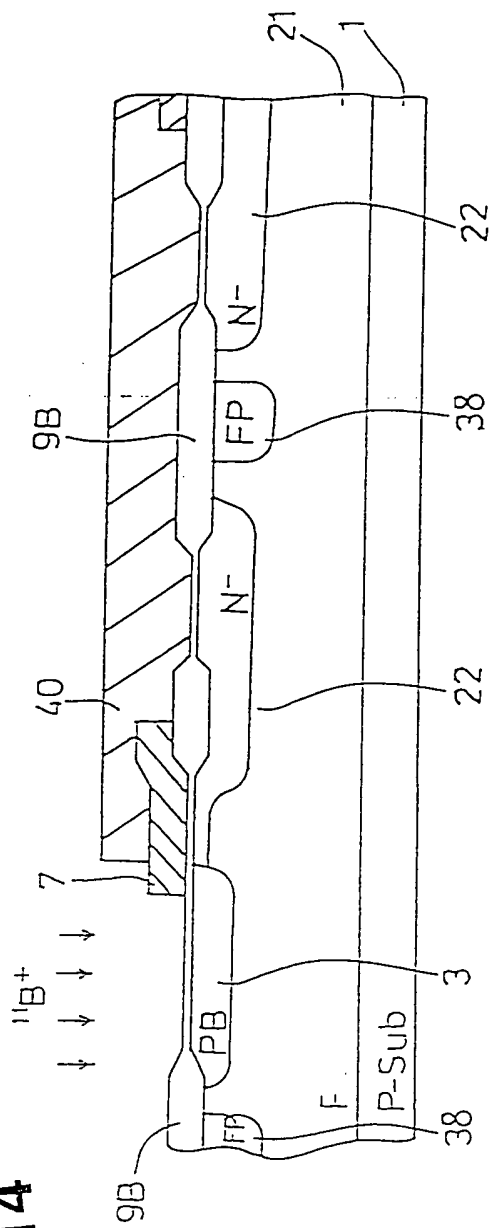


FIG. 15

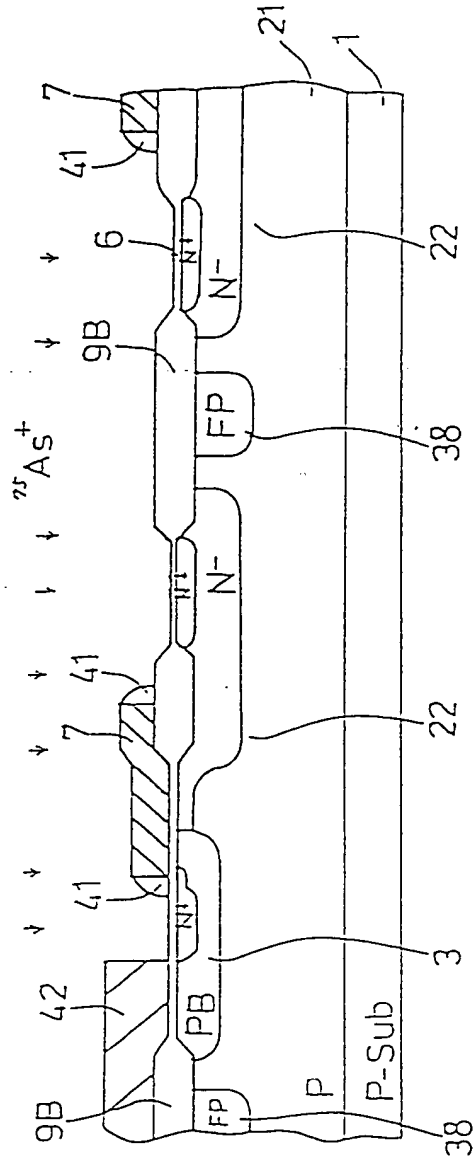
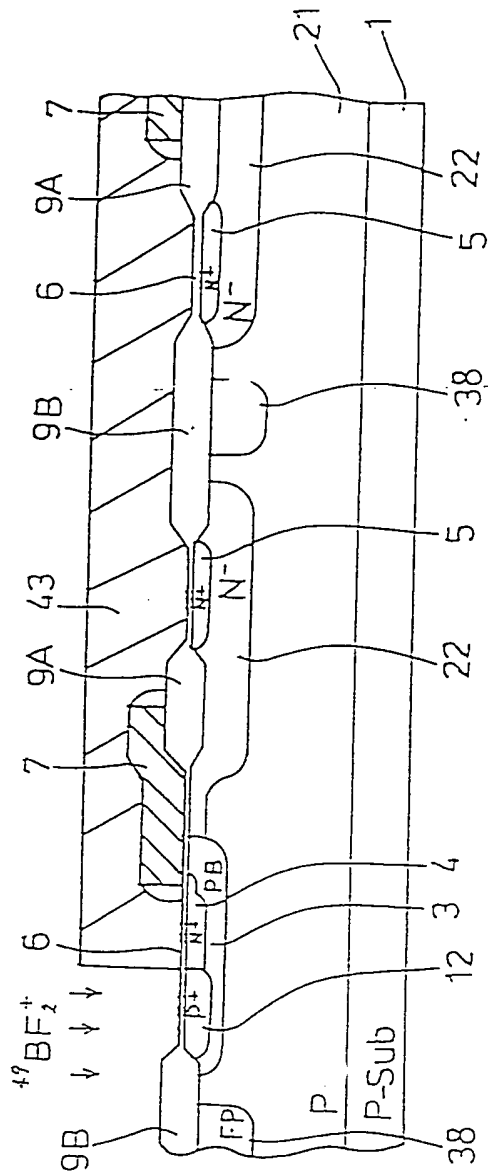


FIG.16



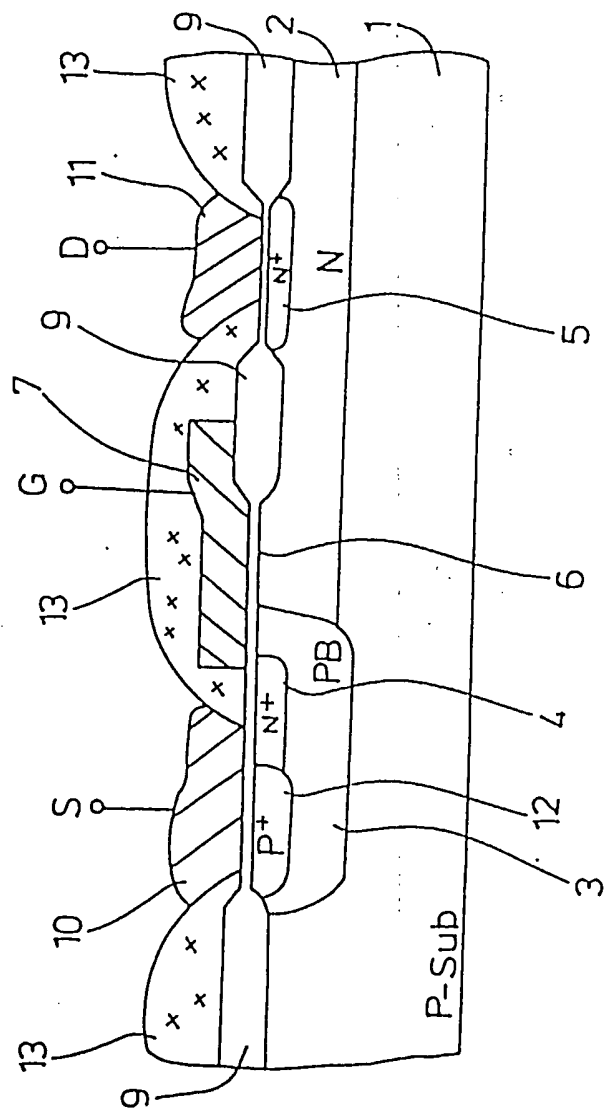


FIG. 18

FIG.19A

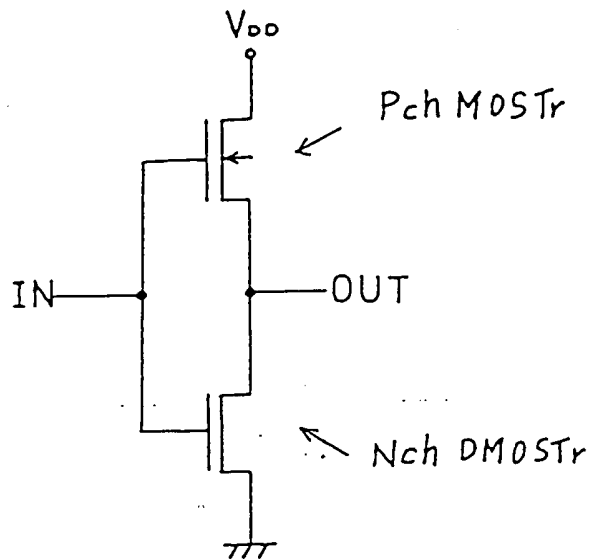


FIG.19B

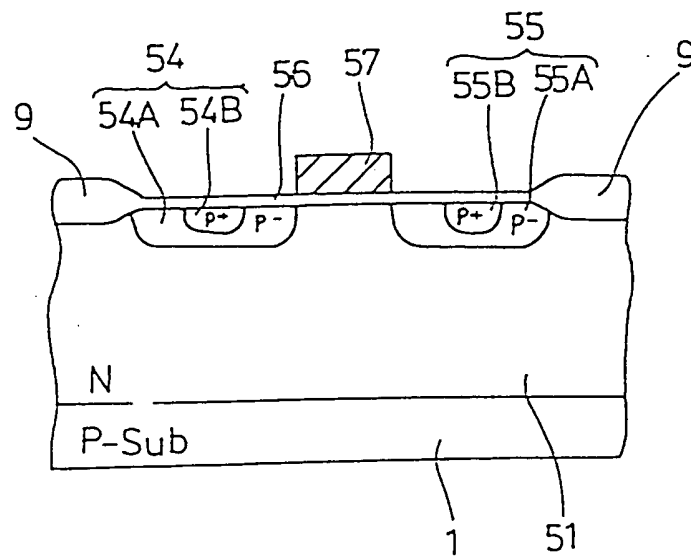
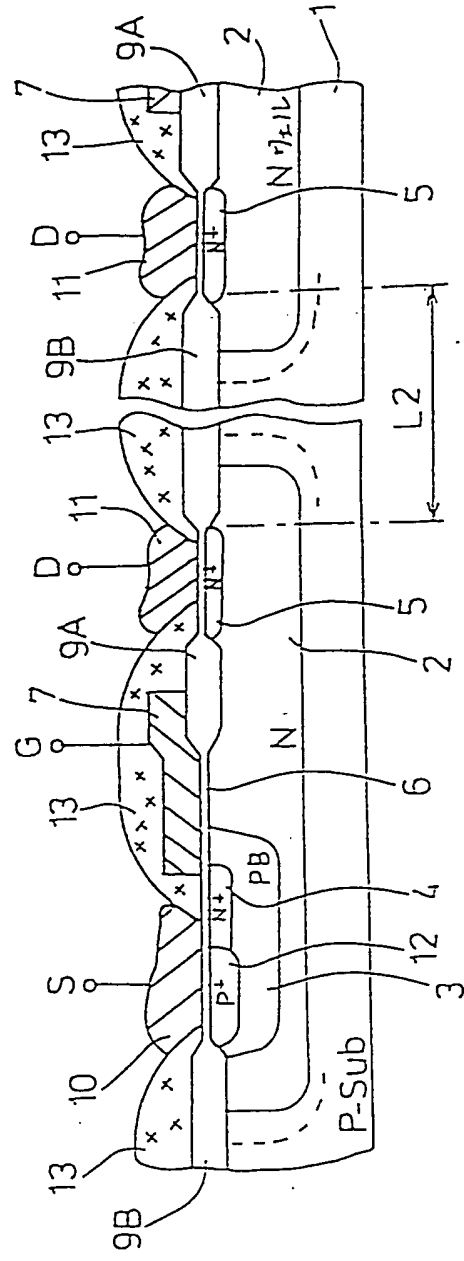


FIG.20



Clamp Voltage vs Na Concentration

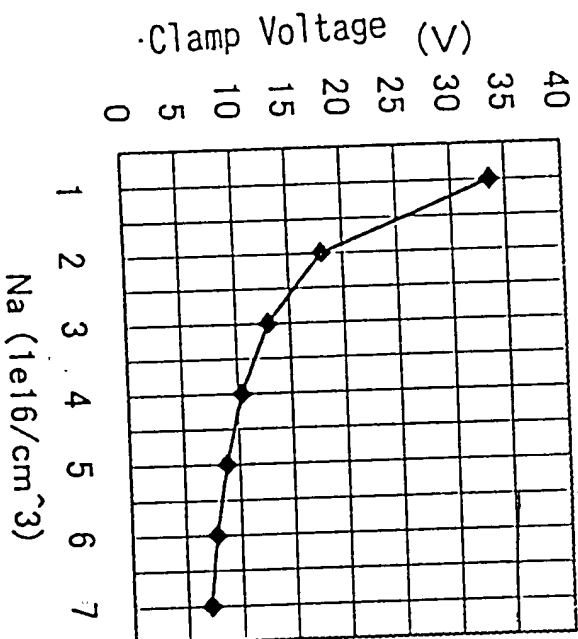


FIG.21

N—Clamp Voltage vs Na Concentration

Stepped Junction N—Concentration $1 \times 10^{17}/\text{cm}^3$

$X_j = 0.2 \mu\text{m}$

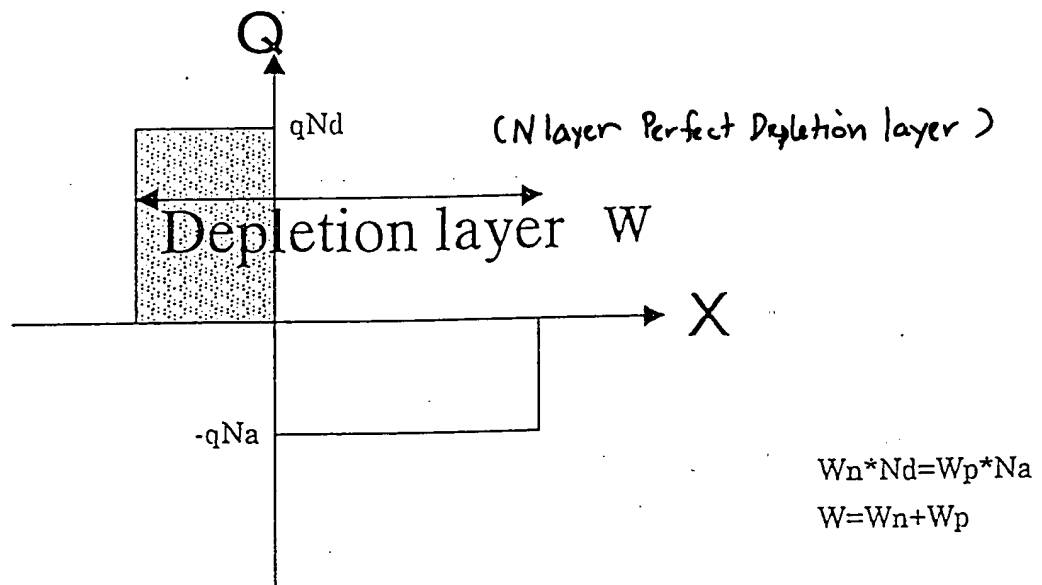
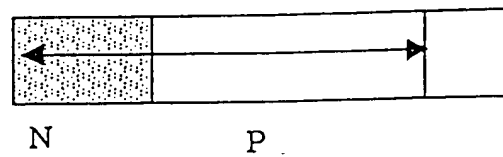


Fig.22 Stepped Junction